

## **Original Research Article**

### **SOCIO- ECONOMIC PROFILE OF WOMEN DAIRY FARMERS**

#### **IN GUNTUR DISTRICT OF ANDHRAPRADESH**

#### **Abstract**

An investigation was carried out to study the socio-economic profile of 225 women dairy farmers in Guntur district of Andhra Pradesh. The study revealed that majority ( $P \leq 0.01$ ) of farm women belonged to middle age group (70.20%), Backward Caste (38.20%) and had primary education (38.67%). Most of them were married (93.80%), belonged to nuclear families (76.40%) and had small family size (76.90%). Labour work and dairying was the major occupation (38.20%) of women in the study area. Most of the women had medium level of experience in dairying (51.60%) and were members in DWCRA/SHG (93.80%). Significant ( $P \leq 0.01$ ) majority of women dairy farmers were frequently in contact with para veterinarian (62.70%) and veterinarian (46.20%). Women in Pedaravuru division had frequent exposure to television (37.30%) and occasional exposure to newspaper (29.30%). Women dairy farmers in Pedaravuru division obtained more income (rupees/day) through dairying ( $888.00 \pm 58.43$ ).

**Comment [H1]:** There is need to identify the objectives of the study before the methodology and findings to aid the readers understanding

**Key words:** Dairy farming, Socio- economic profile, Women dairy farmers, Guntur district.

#### **Introduction**

As an agricultural based country, India's livestock sector has become the backbone of nation's development in terms of economy. Dairy in India plays a crucial role in the rural

economy that has the highest potential of generating income and employment through augmenting productivity of milch animals(Mishra *et al.* 2017). Farming in India is primarily family based and farm women are the back bone of dairy farming. In the current context, the contribution of women to national development, as well as their potential is of greater importance. Women play significant and crucial role in agricultural development and allied fields like dairy farming, vermi compost production, etc. (Kathiriya *et al.* 2013). Women's crucial role in agriculture, allied occupations and household activities, on the other hand has been grossly underestimated and undervalued. Given the importance of women in dairying and allied activities, an investigation was conducted to study the socio economic profile of women dairy farmers in Guntur district of Andhra Pradesh.

**Comment [H2]:** Check spelling

## Materials and methods

The study was carried out in three animal husbandry divisions namely Pedaravuru, Guntur, Narasaraopeta. Five mandals were selected from each animal husbandry division and 5 villages from each Mandal were selected by using stratified random sampling. Three women dairy farmers were selected randomly from each village resulting in 225 respondents. The data were subjected to frequency, percentage, arithmetic mean and chi-square test using statistical package for social science (IBM SPSS 25.0 Version).

**Comment [H3]:** What is the significant justification for this sample?

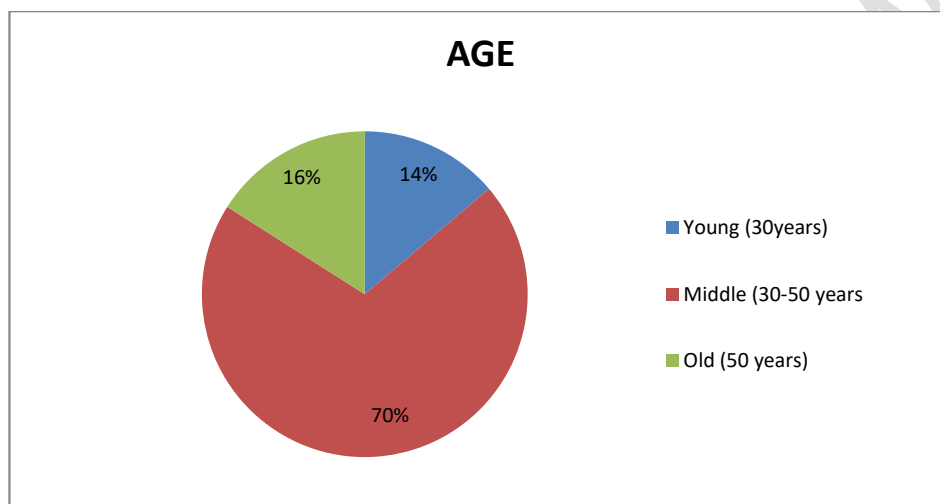
## Results and discussion

Majority ( $P \leq 0.05$ ) of farm women (70.20%) belonged to middle age group whereas 16.00% of old age group and 13.80% of young age group (Figure 1). This might be because farm women in their middle years were deemed to be actively working and responsible for supporting their families through the cash earned from dairying operations. These were similar to the findings of Gulkari *et al.* (2014), Kaur *et al.* (2017), Yadav *et al.* (2017) and Bhunyan *et al.* (2018) who reported that more number of farm women belonged to middle age group in Anand district of

**Comment [H4]:** What is this discussion centered on? No heading

Gujarat, Gurdaspur, Amritsar, Taran-Taran and Ferozepur districts of Punjab, Tumakuru district of Karnataka and Karnal district of Haryana, respectively.

**Figure 1: Age of women dairy farmers in the study area**

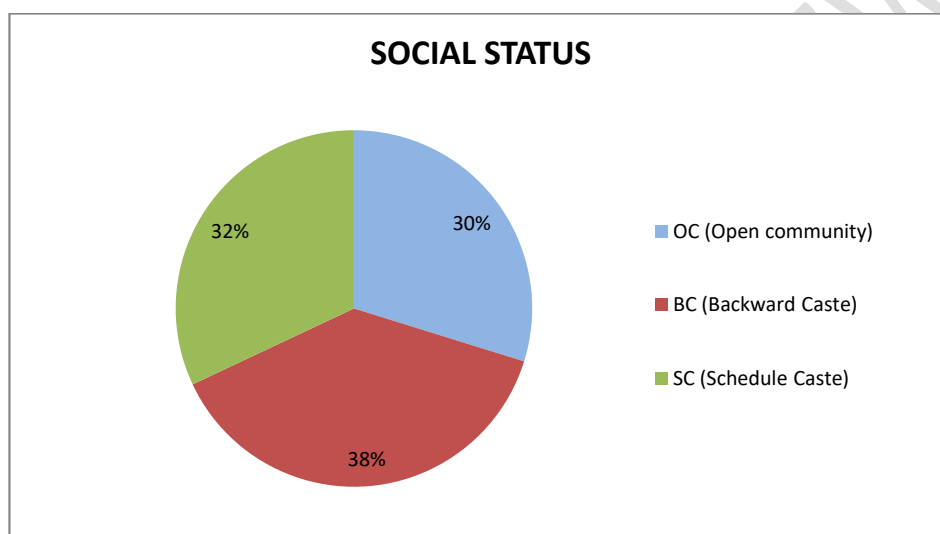


Majority (38.20%) of women farmers in the study area belonged to BC, followed by SC (32.00%) and OC (29.80%). The study proportion of social rank may not accurately reflect the whole situation (Figure 2). The results were similar to the findings of Manju and Yadav (2015) and Patel *et al.* (2017) who reported that majority of farm women belonged to other backward caste (OBC) in Bhilwara district of Rajasthan and Junagadh district of Gujarat, respectively whereas Gupta *et al.* (2020) reported that equal majority of respondents belonged to general and OBC in Surguja district of Chhattisgarh.

**Comment [H5]:** No title/heading

**Figure 2: Social status of women dairy farmers in the study area**

**Comment [H6]:** Naming of figures should be the base of the chart and not above. Ditto to all charts



Majority (38.67%) of farm women were having primary education, followed by illiterate (35.11%), secondary education (18.22%) and higher education (8.00%) in the study area (Table 1). This could be related to the fact that women were responsible for their homes and have traditionally been discouraged by their parents from pursuing higher education. These are similar with findings of Lahoti *et al.* (2012) and Divya Rajpurohit *et al.* (2020) who reported that majority of farm women were having primary education in Maharashtra and Rajasthan, respectively whereas Rathod *et al.* (2011), Luqman *et al.* (2014) and Kaur *et al.* (2017) reported that majority of respondents were illiterate. It was revealed that majority (93.80%) of farm

women were married in the study area. These were similar with the findings of Arshad *et al.* (2010), Rathod *et al.* (2011), Kathiriya *et al.* (2013), Kaur *et al.* (2015), Aparna Radhakrishnan *et al.* (2016) and Yadav *et al.* (2017) who reported that most of farm women were married in Jhung district of Punjab, Bagalkot district of Karnataka, Rajkot district of Gujarat, Hoshiarpur district of Punjab, Shimoga district of Karnataka and Tumakuru district of Karnataka, respectively. It was reported that significant ( $P \leq 0.05$ ) majority of the dairy farm women (76.40%) belonged to nuclear family. The desire of younger generation for economic independence and to provide extra care and attention to their children may be the cause for the dominance of nuclear households. These were similar with the findings of Khan *et al.* (2012), Devaki *et al.* (2015), Pal and Halder (2016), Yadav *et al.* (2017), Bhunyan *et al.* (2018) and Gupta *et al.* (2020) who reported that majority of farm women belonged to nuclear family. It was observed that significant ( $P \leq 0.05$ ) majority of farm women (76.90%) were from small families and 23.10% are from big families. These were similar with the findings of Upadhyay and Desai (2011), Khan *et al.* (2012), Singotiya *et al.* (2014), Aparna Radhakrishnan *et al.* (2016) and Yadav *et al.* (2017) who reported that majority of the farm women were from families having more than 5 members. The study revealed that significant ( $P \leq 0.01$ ) majority of the women (38.20%) were having labour work + dairying as their occupation, followed by agricultural farming+ dairying+ labour work (35.10%), agricultural farming+ dairying (20.00%) as their occupation. Majority of the farm women's primary occupation was labour work + dairying, which necessitated them to pursue any of the secondary occupation in order to improve their financial situation whereas Kathiriya *et al.* (2013), Kaur (2015) and Yadav *et al.* (2017) reported that majority of farm women were involved in agriculture.

**Table 1: Educational status, Marital status, Family type, Family size and Occupation of women dairy farmers in Guntur district**

S.N o	Category	Pedaravur  (N=75) %	Guntur (N=75) %	Narasaraopet  a (N=75)%	Overall (N=225) %	$\chi^2$ value
<b>Educational Status</b>						
1	Illiterate	32.00	32.00	41.34	35.11	8.332
2	Primary education (up to 6 <sup>th</sup> standard)	40.00	42.70	33.33	38.67	
3	Secondary education (6 <sup>th</sup> – 10 <sup>th</sup> standard)	17.30	20.00	17.33	18.22	
4	Higher secondary education (11 <sup>th</sup> – 12 <sup>th</sup> standard)	10.70	5.30	8.00	8.00	
<b>Marital Status</b>						
1	Married	93.30	94.70	93.30	93.80	0.152
2	Widow	6.70	5.30	6.70	6.20	
<b>Family type</b>						

1	Joint family	13.30	28.00	29.30	23.60	6.565*
2	Nuclear family	86.70	72.00	70.70	76.40	
Family size						
1	Small family (4 members)	86.70	73.30	70.70	76.90	6.203*
2	Big family (>4 members)	13.30	26.70	29.30	23.10	
Occupation						
1	Labour work+ dairying	36.00	25.30	53.30	38.20	50.228  **
2	Ag. Farming + dairying+ labour work	44.00	32.00	29.30	35.10	
3	Ag. Farming + dairying	9.30	40.00	10.70	20.00	

Majority ( $P \leq 0.05$ ) of farm women were having medium level of experience (51.60%), followed by low level of experience (31.10%) and high level of experience (17.30%) in dairy farming (Table 2). The results were in agreement with the findings of Gulkari *et al.* (2014),

Hagone and Basunathe (2015) and Prajapati *et al.* (2019) who reported that majority of farm women had medium dairy farming experience of 4.72 to 12.36 years in Rajkot district of Gujarat. It was observed that significant ( $P \leq 0.01$ ) majority of the dairy farm women (71.10%) have not attended any training programmes. This indicates that dairy farm women were not trained regarding scientific management practices related to dairying. The study revealed that majority of women have no participation in Gram Panchayat (96.40%) and cooperative society (85.30%) whereas (93.80%) of the farm women were members in DWCRA/SHG groups in the study area. The results were similar with the findings of Raval *et al.* (2014) who reported that farm women had more participation in DWCRA/SHG compared to Gram Panchayat in Anand district of Gujarat. Devaki *et al.* (2015), Aparna Radhakrishnan *et al.* (2016) and Gupta *et al.* (2020) reported medium social participation whereas Singotiya *et al.* (2014) reported that women had low extension contact in Seoni district of Madhya Pradesh. It was reported that significantly ( $P \leq 0.01$ ) majority of farm women were frequently in contact with veterinarian (46.20%) and para veterinarian (62.70%) but not in contact with secretary of cooperative society (79.60%), friends (35.60%), relatives (48.90%) and others (93.80%) whereas Raval *et al.* (2014) reported that majority of farm women are occasional in contact with veterinarians and frequent in contact with friends and relatives. Upadhyay and Desai (2011) and Prajapati *et al.* (2019) reported that majority had medium level of extension contact. It was revealed that majority (49.30%) of farm women have no exposure to television, newspaper (83.10%) and farm magazines (83.60%). Illiteracy, low socio economic level and lack of leisure time may have prevented them accessing various forms of media. Similarly Devaki *et al.* (2015) reported that majority of farm women had low level of exposure to mass media in Thiruvallur district of Tamilnadu whereas Upadhyay and



Desai (2011), Devaki *et al.* (2015) and Divya Rajpurohit *et al.* (2020) reported that majority had medium level of exposure to mass media.

**Table 2: Experience, Training exposure, social participation, extension contact and mass media exposure of women dairy farmers in Guntur district**

S.No	Category	Pedaravuru (N=75) %	Guntur (N=75) %	Narasaraopeta (N=75)%	Overall (N=225) %	$\chi^2$ value
Experience of women dairy farmers in dairying.						
1	Low level of experience (up to 7 years)	40.00	26.70	26.70	31.10	15.808 *
2	Medium level of experience (7-15 years)	33.30	61.30	60.00	51.60	
3	High level of experience (above 15years)	26.70	12.00	13.30	17.30	
Exposure of women dairy farmers to training						
1	Training programmes attended- yes	32.00	16.00	38.70	28.90	9.909* *
2	Training programmes					

	attended- No		68.00	84.00	61.30	71.10	
Social participation							
1	Gram panchayat	Member	4.00	6.70	0	3.60	4.92
		No participatio n	96.00	93.30	100.0	96.40	
2	DWCRA/S HG	Member	97.3	94.70	89.30	93.80	4.26
		No Participatio n	2.70	5.30	10.70	6.20	
3	Co- operative Society	Member	6.70	9.30	28.00	14.70	16.19* *
		No Participatio n	93.30	90.70	72.00	85.30	
Extension contact							
	Veterinary	Frequently	54.70	32.00	52.00	46.20	13.97*

1	doctor	Occasionally	29.30	57.30	34.70	40.40	*
		Never	16.00	10.70	13.30	13.30	
2	Para veterinarian	Frequently	82.70	64.00	41.30	62.70	29.80* *
		Occasionally	12.00	29.30	38.70	26.70	
		Never	5.30	6.70	20.0	10.60	
3	Cooperative society secretary	Frequently	5.30	4.00	13.30	7.60	20.28* *
		Occasionally	20.00	1.30	17.30	12.90	
		Never	74.70	94.70	69.40	79.60	
4	Friends	Frequently	28.00	40.00	20.00	29.30	28.41*
							*

		Occasionall y	35.40	12.70	51.90	35.10	
		Never	34.70	46.70	25.30	35.60	
5	Relatives	Frequently	29.30	20.00	14.70	21.30	11.96* *
		Occasionall y	37.30	26.70	25.30	29.80	
		Never	33.30	53.30	60.00	48.90	
Mass media exposure							
1	Television	Frequently	37.30	9.30	17.30	21.30	20.485 **
		Occasionall y	25.30	37.30	25.30	29.30	
		Never	37.30	53.30	57.30	49.30	
2	News paper	Frequently	6.70	0	1.30	2.70	30.202 **
		Occasionall	29.30	8.00	5.30	14.20	

		y					
		Never	64.00	92.00	93.30	83.10	

N= No. of women dairy farmers \* Significant at ( $P \leq 0.05$ ) \*\*Significant at ( $P \leq 0.01$ )

## Conclusion

Women need to be educated in order to increase their social participation and media exposure to learn about dairying and animal husbandry practices. More number of women societies, cooperatives, SHGs and organizations should be formed to enhance women participation and increase their economic contribution to the livestock sector. Women need to improve their participation in economic activities of dairy farm. Provision of loans or credits on subsidy basis to dairy women with membership in DWCRA/ SHG to purchase animals, feed, fodder cultivation and other inputs can improve their participation in economic activities.

## COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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